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Positive psychological capital to help combat the mental health fallout from the pandemic and VUCA environment



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Contents

Implications PsyCap May Have for Mental Health
Need for Rethinking the Delivery and Techniques of Mental Health
Learning From Suicide Prevention Research
Real and Potential Impact of a PsyCap Gatekeeper Approach
Certified PsyCap Gatekeeper
Specific Application Examples
The Potential Application of "Fourth Industrial Revolution" Technologies
Selected Bibliography
Appendix A

The major purpose of this article is to provide valuable insights and specific guidelines into how the now established "Positive Psychological Capital" or simply PsyCap can help prevent, treat, and sustainably recover from the current mental health global challenges. Specifically, we propose and demonstrate how PsyCap can play a realistic alternative, supplementary, non-stigma role in fighting the dramatically increasing mental illness due to the COVID-19 pandemic and the VUCA (Volatile, Uncertain, Complex, Ambiguous) environment. Moreover, our hope is the evidence based PsyCap perspective and approach presented in this article will have

a spillover effect on improving performance and especially well-being of individuals, teams, and families long after the coronavirus pandemic is over.

BACKGROUND AND MEANING OF POSITIVE PSYCHOLOGICAL CAPITAL OR PSYCAP

Positive Psychological Capital or PsyCap was introduced into the management and organizational behavior/psychology literature right after the turn of the century (see a couple of articles by Luthans in the 2002 issues of *Journal of Organizational Behavior* and *Academy of Management Executive*). These articles resulted from his participation as an external Gallup Senior Scientist at the first annual Positive Psychology Summit held at the Gallup Organization in 1999. The impetus for this Summit came from well-known

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research psychologist Martin Seligman's 1998 Presidential Address to the American Psychological Association where he charged the field to look for what was right with people rather than the overwhelming emphasis which was being given to what was wrong. Seligman adamantly called for a more balanced shift in research and application, focusing relatively more on the positive. With a newly energized positive psychology, he urged more attention be given to how can psychology move people from being just normal to being extraordinary and thriving, rather than the negative with almost sole attention being given to fixing the abnormal and dysfunctional psychological problems.

During the 50 years following World War II, the standing-up of organizations such as the Veterans Administration and The National Institute for Mental Health (NIMH, which Seligman observed should have been called the National Institute of Mental Illness) resulted in almost exclusive research on the negative — deficits, diagnosis, and treatment of mental illness, at the expense of understanding and leveraging the positive — well-being, happiness, satisfaction — with — life, or better yet, growth, performance and human thriving. This new emphasis in psychological research led to positive psychology and soon after Positive Organizational Behavior and Psychological Capital or PsyCap with groundbreaking research on their impact on performance and eventually well-being.

PsyCap was first defined as state-like positive organizational behavior aimed at improving performance: "the study and application of positively oriented human resource strengths and psychological capacities that can be measured and make a contribution to performance improvement in the workplace" (from the Luthans article in the 2002 *Journal of Organizational Behavior*, p. 698). From the beginning, the following scientific criteria were set and must be met in order to be considered a positive psychological capital resource: (1) theory and research supported and validly measurable, (2) related to positive impact on desired outcomes, and (3) state-like and thus, open to learning, development, change, and management.

Research following these inclusion criteria led to the identification of a second-order, core construct termed Psvchological Capital or simply PsyCap which is comprised of the four well-known positive psychology first order resources of: (1) Hope, (2) Efficacy, (3) Resilience, and (4) Optimism, and is often referred to by its acronym of the "HERO within." Importantly, over about the past two decades, PsyCap both theoretically and empirically has been clearly demonstrated to be a second-order, core construct which accounts for more variance in attitudes, behavior, well-being, and performance than the four individual positive constructs that make it up. In keeping with the inclusion requirements, to date PsyCap as a core construct has a sound theoretical foundation, considerable supporting research (including across cultures), a valid published measure, and has also been clearly demonstrated to be open to development and have a desirable impact on all types of positive outcomes and across a wide variety of workplace domains and cultures (see the top downloaded summary article by Luthans and Youssef-Morgan in the 2017 Annual Review of Organizational Psychology and Organizational Behavior).

PsyCap is specifically defined and now universally accepted as being "an individual's positive psychological

state of development characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future, (3) persevering toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed, and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (from p. 3 of the 2007 and p. 2 of the 2015 Oxford U. Press books on *Psychological Capital* by Luthans, Youssef-Morgan, & Avolio).

The emergence of PsyCap represented a new form of capital (previously largely unrecognized and underdeveloped) that focuses on "who you are" and, even more importantly, "who you can become" tapping into human potential and thriving. PsyCap has been clearly demonstrated to be an evidence-based predictor of all types of workplace performance. More recently, a wealth of published research has clearly shown PsyCap is also related to desired outcomes of all types of well-being at all levels of analysis (individual, group/team, and organizational) in an increasing number of domains. Specifically, PsyCap has been found to predict both performance and well-being, especially in high-stress environments.

IMPLICATIONS PSYCAP MAY HAVE FOR MENTAL HEALTH

Although being positive is generally accepted as being a major contributor to one's mental health, it is still important to acknowledge that positively-oriented human strengths and positive psychological resources still has room for the "dark side of emotions" for well-being and performance. For example, those diagnosed with COVID-19 are expected to experience potentially significant changes in their health and well-being. Immediately following say a COVID diagnosis, one would expect to see an increase in negative emotions, stress, anxiety, and possibly depression. This is a normal response to a traumatic negative event in anyone's life. However, if individuals are trained to focus on the development of positively oriented human strengths and psychological resources, they can encounter such experiences with optimized psychological resources to deal with the challenge. They can create a "buffer" around such stressors, thereby learning the skills to support their wellbeing and performance, even with a COVID-19 diagnosis.

We know from our collaboration with the Dana Farber Cancer Institute at Harvard University that a positive approach may be able to be developed, accrued, and sustained, even among patients facing cancer or HIV diagnoses, informing our PsyCap application to COVID-19. We will explore this further in this article as we begin to understand the often previously untapped and underdeveloped positive resource of PsyCap and its application to the prevention, treatment, and sustainable recovery from the coronavirus and the dysfunctional reactions associated with today's and the foreseeable future's environment.

The recent pandemic has not only fractured the healthcare infrastructure worldwide, but also plunged people in general and employees in particular into a seismic paradigm shift in how they live, work, play, learn, and fundamentally what it means to "be human". Add in awakened awareness and deep concern of human rights and equality issues, unstable and very divisive political forces, the sudden shift caused by the pandemic from largely brick and mortar to open and virtual access, and an accelerating Fourth Industrial Revolution that is upon us. These erupting changes have led to what is increasingly being referred to as a VUCA (Volatile, Uncertain, Complex, and Ambiguous) environment with its accompanying epidemic of stress, anxiety, depression, substance (e.g., opioid) abuse and suicide.

Although use of the acronym VUCA was found by the Army War College Library as far back as 1987, it was commonly used in War College student papers starting in the early '90's. One study examining origins of the term which was published in 1992, attributed it to General Maxwell Thurman. In general, VUCA is considered drawn from the classic leadership theories of Warren Bennis and Burt Nanus and referred to the environment surrounding the collapse of the Soviet Union. Since then, the term has extended beyond the Department of Defense into the organizational literature to describe the current and future turbulent or VUCA environment such as we have been experiencing under the pandemic and further aggravated by Fourth Industrial Revolution drivers. Stress, anxiety, depression, and suicide are often driven by an individual sense of control and self-precepts of efficacy in managing contexts and stressors. Within VUCA contexts, which includes COVID-19, many individuals are experiencing declines in their sense of control and self-precepts of efficacy as evidenced by double digit increases in anxiety, stress, depression, and suicide globally (e.g., the Kaiser Family Foundation recently reported 39 percent of Americans said the current situation was having a negative effect on their mental health and the rate is much higher among health care and other essential workers on the front lines of the COVID-19 crisis).

To date, combatting this mental health crisis has largely taken a singular, medical-model approach. For example, pharmacies are currently reporting a huge increase in the revenues from doctor prescribed antianxiety/depression meds, but overall drugstore non-prescription revenues are way down. There seems no doubt that many are suffering from the mental health fallout from the pandemic and are turning to medically prescribed drugs for relief.

We are proposing the non-stigma oriented positive Psy-Cap, which empowers individuals, groups and teams, leaders, organizations, communities, and even countries, can help combat the mental health fallout from the pandemic. As a bonus, PsyCap can also tap into human potential by improving well-being and performance simultaneously. Specifically, we make the case for and provide the understanding of why PsyCap may play an important alternative/supplementary role to the medical model in combatting the surging mental health issues emanating from COVID-19 and VUCA. In addition, we offer in the appendix a condensed specific evidence-based short training intervention to develop Psy-Cap. Moreover, we also show how PsyCap can be used to globally scale and help close the "knowing-doing" expanding gap in mental health care delivery which exists between individuals/teams/small organizations and large organizations as well as between rural and urban communities worldwide.

COVID-19 has fractured our global healthcare system, to include mental health services, which according to the World Health Organization (WHO) were already woefully lacking. Combined with the stigma associated with seeking help for mental issues, in the pre-COVID-19 environment millions around the world were not receiving the needed mental health services. During COVID-19, the need for masks, hand sanitizers, ventilators and even toilet paper have received tremendous attention, but the global shortage of mental health infrastructure has largely gone unnoticed and unattended. The reality is, from the fallout of the COVID-19 pandemic and the broader VUCA epidemic, millions of individuals can stand to benefit from mental health services, especially those that remove stigma while improving wellbeing and performance. Yet, already millions around the world, and exponentially many more in the future, are mentally suffering (and deteriorating) in silence. We propose this mental health crisis may be alleviated through the recognition and nurturing of PsyCap (one's existing HERO within) and short evidence-based targeted training interventions such as offered by our extensively tested and used Psychological Capital Intervention or PCI (see Appendix A).

NEED FOR RETHINKING THE DELIVERY AND TECHNIQUES OF MENTAL HEALTH

The surging popularity of positive psychology in the mental health field and among the general public has unintentionally contributed to the belief that "if it's not positive, it's not good." However, as Canadian clinical psychologist Paul T.P. Wong and others have noted, this monolithic thinking on happiness, positivity, and "the good life" can in turn make us feel even worse when we are not achieving it. Also, stigma remains a huge barrier to seeking and utilizing professional mental health services, even in highly populated metropolitan areas where it is more broadly acceptable and accessible. As indicated, this fear of the stigma associated with mental illness results in a plethora of individuals around the world suffering in silence, or in some cases, medicating. However, except for the increasing recognition and use of PsyCap as described in this article, we are calling for its wider application as indicated in the title of this article to help combat the current and future mental health crisis.

If the global healthcare infrastructure is fractured because of COVID-19, to include mental health, we must look beyond our current approaches for alternative and at least supplementary solutions. Such alternatives/supplements are needed to extend the reach of mental health and well-being, especially those which simultaneously increase performance—in illness and health. It is well documented that mental health issues left unaddressed can result in physical ailments such as heart disease, diabetes, and ulcers, and of course anxiety, stress, depression, and even suicide. In a COVID-19 environment, where our physical healthcare centers are severely taxed and focused on respiratory care, we must be more proactive in reducing the progression from mental health issues becoming physical ailments which will further stress our healthcare systems.

Alternatives/supplements addressing mental health must also reduce stigma—and be scalable—globally. The World Health Organization recommendation on global mental

healthcare includes the extension of services through educated, trained, and in time certified laypersons in small organizations and communities which can provide basic knowledge sharing and support on mental health. They further name the workplace as a primary driver of stress and anxiety, making organizations also a perfect target for vast global interventions, especially those with reduced or no stigma. We would echo the importance of this approach, along with self-help, which can begin to help bridge the gap between those suffering in silence and those receiving positive life changing help. We are proposing that the application of PsyCap is a step in the right direction. However, now the urgent question becomes one of speed to meet our growing and intensifying mental health challenges associated with COVID-19 and today's and tomorrow's VUCA context with or without COVID-19.

The harsh reality is the majority over the course of their lifetime are statistically likely to encounter mental health issues, both within themselves and within their families. COVID-19 and VUCA are obviously aggravating and accelerating our global mental health decline. Without a basic foundational understanding of mental health, well-being, and performance, individuals and families often struggle with being proactive in obtaining knowledge, receiving treatment, and gaining recovery. Specifically, they lack a "common language" or framework to discuss sensitive mental health issues, and stigma drives a further wedge even between family members who are trusted and unconditionally loved.

LEARNING FROM SUICIDE PREVENTION RESEARCH

The current gloomy picture of the status of mental health is further exasperated by the tragic accelerating rate of suicide. A number of years ago, Dr. Paul Quinnett in his book on suicide, which he called the "forever decision," noted almost all those who attempt suicide share direct or indirect signals, or clues, to loved ones, family members, co-workers, and members of the community in the weeks and days leading up to their suicide attempt. Oftentimes, these signals or clues are expressed (either directly, "I don't want to live any longer," "life is harder than death for me," or indirectly, "pretty soon you won't have to worry about me any longer") without actionable acknowledgement by the person receiving the message.

According to Dr. Quinnett and his QPR (Question, Persuade, Refer) Institute, post-analysis of a suicide attempt or completion too often indicates many clear signals were left unattended. Quinnett's Institute has spent over 30 years researching suicide, to include post-suicide analysis by military veteran's and loved ones suffering from very treatable mental illnesses. His research indicates that in the days and weeks preceding a suicide attempt, these clues are unfortunately too often left unattended. This is because the general public are largely ignorant of scientific evidence and knowledge regarding suicide prevention, feel a sense of fear when a colleague, friend or loved one shares such thoughts, and are more inclined to NOT address important signals and clues than they are to "lean in" and ask the important questions and provide personal support or get the needed help which could save lives.

Education and military mental health experts use an evidence-based "Gatekeeper Model" of suicide prevention which is intended to do just what the World Health Organization and we recommend. It is designed for <u>laypersons</u> to become educated, knowledgeable, and aware of the signs of depression (the leading and most treatable cause of suicide). According to the Center for Disease Control and Prevention, approximately 90% of all completed suicides are by persons suffering from untreated or under-treated mental health disorders.

This Gatekeeper protocol provides specific steps, actions, and behaviors the aware layperson should follow. For example, the ideal for these Gatekeeper steps are to be analogous to the generally well-known medical model's FAST guideline for identifying a potential stroke (Facial drooping, Arm weakness, Speech difficulties, Time). The goal of such simple guidelines for the layperson is to lead to the individual in crisis receiving immediate help and then, if necessary, professional treatment. It is not in the scope of this article to get into details of the Gatekeeper training protocol, but below we do follow the Suicide Prevention Resource Center's recommendation of combining the Gatekeeper model with strategies like our PsyCap Intervention (PCI, see Appendix A).

According to Dr. Quinnett, suicide is a permanent solution to a temporary problem, and that temporary problem (usually depression) in most cases of suicides, is very treatable. In fact, many individuals who become suicidal and receive support during the days and weeks of this crisis, go on to lead successful fulfilled lives, and never deal with suicidal ideations again. We propose the PsyCap Intervention summarized in Appendix A could provide great value in proactively building, accruing, and leveraging PsyCap resource caravans, which are known to reduce stress, anxiety, depression, and Post Traumatic Stress Disorder (PTSD), could also be applied to help combat suicide.

Over the course of our careers, we have conducted research and evidence-based applications of short PsyCap Interventions (the PCI). Recently, we have successfully adapted our PCI to include some of the Gatekeeper model of suicide prevention for U.S. military and intelligence personnel. This hybrid Gatekeeper approach (detailed in Appendix A) seems especially applicable to the delivery of PsyCap training interventions to underserved populations. Basic knowledge, education, growth, development, prevention, treatment and cure approaches to well-being and mental health drive a deep wedge between those who have access to health care and those who do not. Moreover, COVID-19 will leave a mark on all people globally for years to come and intensify VUCA. Unfortunately, this long-run impact will complicate mental health issues further with the inevitable increases in the VUCA epidemic of stress, anxiety, depression, substance abuse, violence (to include bullying, sexual harassment, and incivility), grief, and even suicide.

As we reflect on the relevance of the evidence-based Gatekeeper model of suicide prevention, we see many avenues where it can be easily and effectively adapted and used with PsyCap developmental interventions (PCIs) in offering a framework for COVID-19 and VUCA epidemic prevention and treatment of mental issues. Most importantly, our research and academic discussions around the world have demonstrated that even those most sensitive of stigma associated

with any psychological intervention, there is an openness and embracement of PsyCap driven by the focus on the positive- well-being and performance.

Whereas individuals may experience stigma related to mental health challenges deterring their engagement, we have found wide acceptance with an openness, curiosity, and deeply held interest in the science of PsyCap well-being and performance. The positively- oriented PsyCap focuses on the HERO within — "who we are" and, most importantly, "who we can become" leading to increases in human potential and thriving. The development of PsyCap hope, efficacy, resilience, and optimism, our HERO within, provided to individual, team, organizational, community, and country levels of analysis and inclusive of family members and co-workers/teammates, seems to be an overlooked way to address today's and tomorrow's mental health challenges.

REAL AND POTENTIAL IMPACT OF A PSYCAP GATEKEEPER APPROACH

Exploring further the gatekeeper model of suicide prevention, we see many synergies that could be leveraged through a similar PsyCap Gatekeeper Well-being and Performance Model. Following the lead from positive psychology which switched from a focus on the negative to the positive, this hybrid model would focus on positive psychological resources and growth (tapping into human potential and thriving), rather than pathology or mental illness diagnoses.

To reiterate, established evidence based PsvCap offers a healthy dose of scientific well-being and positive psychology to not only organizational participants, but also youth and people in general, while removing stigma. Further, we see the delivery of PsyCap through individuals, teams, and small or large organizations (all workplaces, including business, education, healthcare, sports, police, the military, and public sector organizations) as they provide an entry point for needed scalability. This method of delivery also extends organizational social responsibility to include organizational participants' family members and general members of the community. As the World Health Organization identifies the workplace as the primary source of stress, and stress increases globally, we in turn see workplaces and organizations as also the conduit for alternative/supplemental solutions in order to meet the increasing demands of global declining mental health. Furthermore, we see educational institutions as key early entry points to build PsyCap resources from K-12, into college and early adulthood, which are preparation for arriving in the full-time workforce.

As we face COVID-19 and VUCA epidemic prevention, treatment and sustainable recovery, mental well-being is continuing a sharp decline that, as indicated, began prior to the coronavirus pandemic. As a result, our PsyCap Gate-keeper Well Being and Performance Model, or what we simply call "PsyCap Gatekeeper" or simply PCG is offered as a viable alternative and/or supplement in the overall solution addressing our COVID-19 and VUCA epidemic response and recovery. Very importantly, as the recently developed vaccines become readily commonplace to combat COVID-19 and subsequent pandemics, a PCG approach can still help optimize human well-being and performance. We propose PCGs could potentially proactively promote future

success in our schools, universities, and all individuals, teams, and organizations. PCGs could help in developing and accruing essential positive psychological resources to buffer the impacts of VUCA contexts and in general improve one's performance and well-being.

The PsyCap Gatekeeper Model described in Appendix A is currently being applied globally through our Positive Organizational Behavior Institute (POBI)—a recently formed Washington, D.C. based non-profit global think-tank committed to the development of well-being and performance (see our web-site at www.pobi.org). The POBI is comprised of leading PsyCap scholars from around the world who are committed to the aspirational mission of improving wellbeing, performance and beyond. We know from the scientific evidence that PsyCap can have a significant positive impact beyond general well-being and performance. For example, one of our recent well-being studies found both relationshipand health-PsyCap positively correlated to objective desired positive outcomes such as increased time spent with friends and family for relationships and lower BMI (Body, Mass. Index) and cholesterol for health.

When PsyCap is studied within organizations, we know from extant research on every continent that leaders tend to have significantly higher PsyCap than followers, that leader PsyCap is predictive of follower PsyCap (through social contagion), and individual and collective PsyCap significantly impacts core team functioning through positive communication, planning, coordination, collaboration, creativity, innoproblem-solving, vation, and constructive conflict management within teams. We imagine a world where Psy-Cap is institutionalized throughout our educational and university systems well in advance of entry into the global workforce. This will further prepare our future leaders, employees, and citizens of the world to not only achieve well-being and performance, but also to thrive, even amidst global threats such as COVID-19 and VUCA. As we "age and gray" globally, engaging future potential leaders and employees from early educational and university environments will not only prepare our organizations for the adversities that lay ahead, it also nurtures and armors the next generation to be better prepared for an amplified VUCA context and COVID-like crises which are certain in our collective futures.

Within the workplaces that employ our global workforce, unemployment and changed job roles resulting from COVID-19 and VUCA will significantly redefine millions, if not billions of people's lives, fundamentally altering "who they are" and "who they can become." Embracing the World Health Organization's recommendations of engaging laypersons to meet professional shortages in mental health care worldwide, we believe that PsyCap may be able to provide a framework, or common language. The PsyCap approach not only has been empirically shown to increase individual and organizational performance, but also can make its way into team interactions and meetings and even around the dinner table where family systems can approach adversity within a common evidence-based framework which drives significant improvements in a number of desirable outcomes.

We extend the now well established PsyCap favorable impact on work, relationships, health, well-being, and performance, and, as we have seen in this article, to COVID-19 and VUCA. As part of a COVID-19 specific response we believe

that PsyCap can build well-being and performance in our prevention, treatment, and sustainable recovery. Specifically, individuals who proactively develop and accrue PsyCap resources are expected to demonstrate measurable and significant increases in their psychological capital positive resources (hope, efficacy, resilience, and optimism). These provide a "buffering-effect" as individuals encounter stressors, anxiety, and depression related to COVID-19 and VUCA. Because PsyCap has been empirically demonstrated to have not only correlational, but also causal, impact on desirable changes in attitudes, behaviors, well-being, and performance, we expect individuals with higher PsyCap to also be more conscientious and aware of preventative measures (e.g., wearing masks, hand washing and social distancing during the COVID-19 pandemic and stress-management and exercise regimens under VUCA).

CERTIFIED PSYCAP GATEKEEPER

This backdrop leads us to more specifics of our newly proposed PsyCap Gatekeeper or PCG. This new model proposes the engagement of laypersons within the family, educational (K-12 and college/university), and all organizational workplaces who could become certified as PsyCap gatekeepers. Analogous to Certified Public Accountants (CPAs) or Certified Financial Analysts (CFAs), these Certified PsyCap Gatekeepers (CPCGs) could serve within their respective work and social spheres as focal points where newly developing psychological capital resources (PsyCap hope, efficacy, resilience, and optimism or the HERO within) are formally or informally recognized, developed, and sustained. This CPCG approach could provide many specific benefits such as the following:

- (1) reducing and acting as a buffer to stress, anxiety, depression, post-traumatic stress disorder, suicide, substance abuse, violence, sexual harassment/abuse, counterproductive work behaviors, and intentions to quit by nurturing often previously untapped and underdeveloped psychological resources found in Psy-Cap,
- (2) increasing well-being and performance (within schools, universities, organizations, all workplaces, communities, and even countries),
- (3) bridging the "knowing-doing" gap by extending well-being, performance, and mental health services to rural populations leveraging Fourth Industrial Revolution scientific breakthroughs and technological advancements (i.e., virtual transformational learning, artificial intelligence, consequential decision making, gamulations, etc.),
- (4) extending organizational social responsibility efforts as a way to give back to the community, while simultaneously strengthening the workforce and family members,
- (5) creating new job opportunities for individuals who are certified as PCGs, combatting the global COVID-19 pandemic and the aftermath of VUCA with accompanying unemployment crisis,
- (6) providing a malleable domain specific framework based upon rigorous scientific evidence that is highly

- scalable and adaptable (e.g., K-12, universities, and all workplace domains),
- (7) increasing well-being and performance among our most vulnerable population, our youth, while proactively planning for their future amplified VUCA contexts. In addition to well-being and performance improvements provided to our youth, we believe that PsyCap also plays a critical role in school safety, and the prevention of violence, to include the cyber bullying epidemic,
- (8) empowering females to explore new career opportunities in order to combat gender-based violence, while increasing their entrepreneurial potential and promoting national well-being through continuing education units and certification as PCGs through evidence-based training and development,
- (9) providing a framework for entire systems (individuals, families, groups and teams, leaders, communities, and countries) to leverage as a "common language" in proactively building psychological capital resources, as well as the skills and practices leveraged to rely on these resources during VUCA contexts, to include COVID-19 prevention, treatment and sustainable recovery; and finally,
- (10) increasing our ability to react and recover from COVID-19 today, as well as proactive preparation for future accelerated and intensified VUCA adversities and challenges (future global pandemics, shifting and blurring geopolitical structures and governing frameworks, environmental disasters, violence, post COVID-19 seismic paradigm shift that is changing everything).

We contend Certified PsyCap Gatekeepers (CPCGs) could play an essential role in organizations in relation to COVID-19 and VUCA pressures and overall well-being and performance of their employees. As we experience the Fourth Industrial Revolution radical advancements, alongside the mental health fallout of COVID-19 and accelerated VUCA, new forms of capital beyond the economic/financial, such as Psychological Capital, will be required. As a result, Certified PsyCap Gatekeepers would have positive organizational behavior education providing a multi-disciplinary, stigma-removing approach to well-being and performance in the workplace in all domains.

As organizations globally prepare for the response and eventual recovery from COVID-19, one thing seems certain--how and where we work has been fundamentally altered. Much like 9/11 led to extreme changes in the way we travel (e.g., airport security lines and no-shoes screening), a COVID-19 impacted workplace will require additional extreme changes which, combined with the rapid acceleration of the Fourth Industrial Revolution, lead to the churn of an intensified VUCA context. These intensifying VUCA contexts are certain to increase levels of stress, anxiety, and depression. We know from the World Health Organization that the workplace is a primary target of this VUCA epidemic, with stress primarily being attributed as coming from organizations. We also believe educational institutions and workplaces can be a primary venue to deliver short evidence based Certified PsyCap Gatekeeper training adaptable to individual, team, leader, and organizational levels.

Organizations can expand their knowledge and expertise of PsyCap development as an important part of their Employee Assistance Program and organizational social responsibility (i.e. Certified PsyCap Gatekeepers can facilitate and create a bridge to Employee Assistance Programs, while reaching individuals much earlier in their mental health challenges, and the same skills provided by Certified PsyCap Gatekeepers can be expanded outside workplaces to families, schools, and the community). Organizational social responsibility focuses on many types of stakeholders and outcomes, including stakeholders outside the organization and outcomes that go far beyond financial results. This expanded organizational social responsibility seemingly provides an ideal framework for the inclusion of the PsyCap Gatekeeper Model.

In addition to providing significant advantage to the organizations who implement PsyCap, the Certified PCGs within organizations can provide knowledge, skills, and abilities that can be realistically extended to team and community members, to include schools and families. This provides organizational participants, their family members, and key stakeholders within the community a "new PsyCap language" which can be shared across family dinner tables and team/organizational human resources-oriented meetings globally. This could serve families and organizations well during their attempts to prevent, treat, and sustainably recover from COVID-19 and more effectively cope with VUCA, as well as supporting future organizational and whole community well-being and performance.

SPECIFIC APPLICATION EXAMPLES

In recent times, the U.S. Government has taken well-being and performance seriously, resulting in over a million military service members, federal civilian employees, and contractors receiving evidence-based training that directly or indirectly utilizes PsyCap and its resources. This includes positive psychology's massive U.S. Army Comprehensive Soldier & Family Fitness program, and the more PsyCaporiented well-being and performance efforts replicated throughout the U.S. Department of Defense, Department of Homeland Security (all components, inclusive of Federal Emergency Management Agency (FEMA), Transportation Security Administration (TSA), U.S. Citizenship and Immigration Services (USCIS), and the Secret Service) and also the intelligence communities. In addition to these U.S. government agencies, directly or indirectly, we also have been involved in PsyCap programs with well-known corporations such as Boeing, DuPont and Shell Oil, internationally such as with China Mobile, and in health care such as with Harvard's Dana Farber Cancer Institute. In addition to the exponentially growing body of published academically-oriented basic research studies (e.g., see the end of article Selected Bibliography), these applications have contributed many lessons learned which have been carefully considered and incorporated into our proposed approach.

Analysis of these real-world implementations have shown a number of positive outcomes (well-being, performance, subjective well-being, relationship- and health-PsyCap, team functioning, engagement, creativity, innovation, leadership, etc.) while reducing negative outcomes (stress,

anxiety, depression, grief, substance abuse, post-traumatic stress disorder, divorce, domestic violence, harassment, bullying, etc.). Programmatic implementations that operationalize to improve well-being and performance are often accompanied through organization-wide train-the-trainer programs. The aim of these programs is empowering employees within organizations to become "masters" of the evidence based PsyCap content, adapted and repurposed for internal delivery. We have found during times of crisis; individuals are more likely to reach to a fellow co-worker for social support over a stigma-inducing mental health professional. Because positively-oriented PsyCap using language such as hope, efficacy/confidence, resilience, optimism, and especially the HERO within, and focuses on wellbeing and performance, through qualitative analysis and observation we find that stigma is replaced with openness, curiosity, and engagement. Participants have a keen desire to obtain knowledge that both support psychological wellbeing and organizational client specified performance out-

We have largely found the PsyCap training participants have experienced buy in/engagement to the point where they actively exhibit a variety of desired behaviors and outcomes post-training, thus solving the age-old training to practice gap. Examples include organizational citizenship behaviors and organizational social responsibility activities to expand and scale their newly developed PsyCap training and to family members and external stakeholders, to include broader community members, e.g., Junior ROTC (High School Reserve Officers' Training Corps), public and private school systems and civic presentations. The result is the accrual of collective PsyCap (what we call cPsyCap) resources which are applied across not only workplace organizations, but also in the family and community levels. This cPsyCap provides that "new language" for dealing with and addressing adversity, as well as excelling at the individual's highest potential for well-being and performance. In fact, the Department of Defense Educational Activity programs have recently implemented PsyCap-oriented well-being and performance skills training and to youth attending schools near military installations.

The success of these short, targeted, evidence based PsyCap Interventions (see Appendix A) have led to substantial increases in well-being and performance. These results both proactively and reactively prepare employees, family members and community stakeholders for adversity and recovery from crises such as the COVID pandemic and the VUCA epidemic, as well as optimal well-being and their individual and organizational performance.

THE POTENTIAL APPLICATION OF "FOURTH INDUSTRIAL REVOLUTION" TECHNOLOGIES

Most would agree the Fourth Industrial Revolution is upon us. As mentioned previously, this Fourth Industrial Revolution is actively expanding VUCA contexts resulting from increasingly divided social, cultural, and geopolitical boundaries, changing and polarizing government frameworks, and continual, disruptive scientific and technological breakthroughs. These are all contributing significantly to accelerating the intensity of a VUCA environment. While

there is often a tendency to negatively discuss and be fearful of the risks and daunting challenges of the Fourth Industrial Revolution, we choose to look at this revolution for positively-oriented assets and opportunities. For example, scientific and technological advancements may be able to assist in the proliferation and access to PsyCap resources, and broadly speaking, meeting the mission of extending well-being and performance practices globally.

We have searched around the world for Fourth Industrial Revolution technologies which may help in the application of PsyCap, to include the use of artificial intelligence and innovative measures. For example, Dr. Kazuo Yano, a Positive Organizational Behavior Institute Fellow and Corporate Chief Scientist, Hitachi Ltd, in Tokyo, Japan, is a leading collaborator in this space. Originally, Yano focused on happiness as the outcome of artificial intelligence interventions to improve employees' well-being. Based on mutual interests, he began a collaboration with us on the use of artificial intelligence to support the development, accrual, and sustainment of the PsvCap of human resources. Yano's work utilizes wearable technology devices and mobile applications that leverage sensors on lanyards or mobile devices that track, among other variables, biometric data, physical movement, voice (patterns not content), eye contact, and social interactions within the workplace. Employees utilizing his technology receive the benefits of machine learning combined with artificial intelligence to detect patterns both supporting and detracting from well-being and performance.

Based upon years of historical data collections involving thousands of participants (i.e., "Big Data"), Yano and his team have developed algorithms which are drawn from to engage employees throughout their workdays with prompts which facilitate and promote well-being and performance. Big data analytics are used to stimulate and trigger behavioral changes for the participants to undertake (e.g., "time to take a break," "you've been sitting for two hours straight," "today is a good day to reflect on your optimism and gratitude, the positives in your life." Obviously, wearable devices and mobile technologies have much to offer in one's prevention, treatment, and sustainable recovery from COVID-19 and VUCA. This represents just one example of the Fourth Industrial Revolution technologies which may help in implementing PsyCap programs.

Another example showing especially huge potential for effective training and development is our collaboration with the University of Washington's Bruce Avolio's "gamulation" technology which is a hybrid of increasingly popular gamification and established simulation. Avolio's dynamic gamulations empower participants to develop efficacy in managing towards desirable outcomes and serve as valuable tools in assisting individuals, teams, and leaders as they manage and strategize in VUCA contexts. Consequential decision making is developed and nurtured in the safe, but realistic context of high-tech virtual learning environments.

For example, recently within the Federal Emergency Management Agency (FEMA), national disaster management and recovery professionals have begun to use realistic vignettes to practice consequential decision making, and the development of a "leadership" practice within all levels of the organization. These gamulation vignettes provide a safe environment to practice for current and future disasters, all the while maintaining and developing well-being and performance. As the number and velocity of disasters increase (hurricane's exceeding 10 per season, the highest since 1914, and the seas testing 3 degrees higher in temperature creating the environment for more tropical storms), FEMA is taking well-being and performance to heart as they prepare for the agency's future.

The Fourth Industrial Revolution is fundamentally altering our ways of being human from a focus on brick and mortar, face-to-face collaboration spaces to virtual environments. These same Fourth Industrial Revolution disruptive technologies are also changing our learning behaviors, from classroom and face-to-face, to virtual delivery via Zoom, Teams, Google Classrooms, Blackboard, Canvas and Coursera. This digital expansion from brick and mortar to virtual engagement provides a valuable window of opportunity to leverage Fourth Industrial Revolution technologies to scale PsyCap awareness and implementation.

CONCLUSION

As the COVID-19 pandemic and the VUCA environment ravishes the world's physical and mental health, stress-testing healthcare, government, education, and all workplace organizations, we approach a great "reset" in what it fundamentally means to be human. As COVID-19 specific prevention (including techniques and vaccination), treatment, and hopeful sustainable recovery accelerates, we are proposing that the evidence-based PsyCap approach and developmental PsyCap Intervention or PCI (see the following Appendix A) as presented in this article would seem to be able to play an important, viable, safe, realistic, nonstigma, but overlooked, role.

In addition, through PsyCap we offer a host of benefits worldwide in increased well-being and performance and help close the knowing-doing gap in delivering mental health services to the underserved through our newly proposed scalable PsyCap Gatekeeper (PCG) approach and Fourth Industrial Revolution wearable technology and gamulation training. Perhaps most importantly for now, we believe the recognition and development of PsyCap positive resources can serve to realistically help combat the mental health fallout from the current pandemic and help prepare for the challenges the world will face in the intensified VUCA contexts we are certain to experience in the foreseeable future.



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APPENDIX A

PsyCap Intervention (PCI) and Certified PsyCap Gatekeeper (CPCG) Model

Today, most global citizens have been, are, and likely will be in the foreseeable future experiencing heightened stress, anxiety, and depression. Currently, these mental health issues are related to the anticipation, diagnosis, and treatment of COVID-19 and to a degree the greater VUCA (Volatile, Uncertain, Complex, Ambiguous) environment. In addition, the stigma still associated with seeking help for these problems often results in silent mental suffering. We propose that the relatively easy, evidence-based development approach outlined here to nurture and increase one's Psychological Capital (PsyCap) can provide valuable, nonstigma positive psychological resources (hope, efficacy, resilience, and optimism, the HERO within) to help combat the mental health fall-out from the times we live in now and in the future.

PsyCap has been empirically demonstrated in numerous published academic articles to be significantly negatively related to stress, anxiety, burnout, and depression. In addition, PsyCap has also been shown in studies published in the academic literature to be open to development through short PsyCap Interventions (PCIs as outlined below). Importantly, there are also published randomly assigned control group, true experimental studies which found developed PsyCap caused improvement in attitudes and performance. We propose that when individuals, families, teams and workplace organizations in all domains learn the simple skills of developing PsyCap resources as presented here in the PCI, they are able to lean-in and leverage this new source of "capital" as it defines and better identifies "who they are" and "who they can become" to maximize their human potential and thriving. The following provides the specific guidelines for the PCI and the newly proposed Certified PsyCap Gatekeeper (CPCG) model.

GUIDELINES FOR PSYCAP INTERVENTION (PCI) [and for Certified PsyCap Gatekeeper CPCG]

PsyCap Resource

Hope

The Psychological Capital Intervention (PCI) uses a three-pronged strategy in a goal-oriented framework - (1) goal design, (2) multiple pathway generation, and (3) overcoming obstacles.

Begin by identifying an individual, family, team, and/or organizational valuable goal which they will use throughout the process, ensuring that goal design includes: (1) concrete end points to measure success; (2) an approach (rather than an avoidance) framework, which allows the trainee(s) to positively move toward goal accomplishment instead of away from undesired outcomes; and (3) importance of identifying sub-goals in order to reap the benefits of even small "wins", which the late well known positive psychology hope expert Rick Snyder referred to as "stepping". Pathways are then developed. Trainees are asked to generate multiple pathways to their well-being and performance goal(s). Trainees are encouraged to work together with relevant others in brainstorming as many alternative pathways as possible, regardless of the practicality of implementation. The final step is to inventory pathways; the PCG guides the trainee(s) in discarding unrealistic goal pathways, and a smaller number of realistic goal pathways are identified and ranked.

Obstacles can act as goal blockers leading to negative reactions such as frustration and disengagement from pursuing goals, especially during the prevention and treatment of a global pandemic such as COVID-19. The trainee(s) are instructed by the PCGs to take a few minutes to consider the potential obstacles, or "what can stop you from accomplishing your goal(s)?" After time for self-reflection, the trainee(s) again reconvene to determine alternative perspectives on potential obstacles and strategies to overcome them.

At the completion of this hope dimension of the PCI, the trainee will have identified a valuable goal in such a way as to take ownership, be prepared for identified obstacles, and be ready to quickly implement multiple pathways as contingency plans. Throughout this COVID-19 (VUCA problem) targeted PCI development process, the certified PCG tries to acknowledge and encourage positive "self-talk". The CPCG maintains focus on goal setting, pathway generation, and overcoming obstacles as a process that can and should be applied to an array of those needing help. Transferability back to daily life is emphasized. In other words, this part of the specific PCI focuses on how to increase participants' level of hope in their larger unit to accomplish goals individually and collectively, ultimately developing what we refer to as collective PsyCap, or cPsyCap. Most importantly, the skills learned during the targeted PCI are applicable to domains outside the current situation; they are generalizable.

Exploring the process of building PsyCap hope further and through example, as the now trained targets learned about and developed their hope, they become empowered. This can be easily accomplished by developing realistic goals, identifying their specific strengths and weaknesses, and collaborating on pathways towards goal achievement. When goal pathways are blocked, they have learned the necessary skills to be flexible and adaptable, empowering them to quickly reset and refocus on predetermined alternate pathways to achieve and positively continue forward in goal pursuit and eventual attainment.

Efficacy (Confidence)

World renown social psychologist Albert Bandura is credited for the theoretical foundation and developmental process for building efficacy or confidence. When developing PsyCap, efficacy was arguably the most criteria-meeting and academically accepted of the four components. The efficacy input into our PCI largely draws from Bandura's widely recognized taxonomy of sources of efficacy. These include: (1) task mastery or success, (2) modeling or vicarious learning, (3) social persuasion and positive feedback, and (4) physiological and/or psychological arousal. Besides these Bandurian sources of efficacy, the PCI also incorporates his emphasis on the role that goal-orientation and framing plays in building efficacy. In addition, there is extensive academic literature that evolves efficacy from an individual or self-asset, to the collective (e.g., families, teams, and organizations) through similar collective efficacy development.

The PCG would encourage the family/team/organizational members to discover and evaluate where there may be natural talents, where personality factors match efficacy requirements (e.g., choosing the family/team optimist to keep optimism high during COVID-19, the family/team pessimist to assist with identifying potential goal obstacles, etc.). The PCG engages in allowing participants to experience and model success, and through social persuasion and arousal, are all aimed at accomplishing the goals set earlier in the development of PsyCap hope. This efficacy building process elicits positive emotions and builds the participants confidence and also collectively the family's/team's/organization's confidence, to generate and implement plans to attain the set goals.

The PCG and family/team/organizational members serve as role models for this efficacy-building process. Bandura asserts that the perceived expertise and the relevance of models are key to determining the magnitude of influence. As described under the hope input into the PCI, when participants generate pathways, inventory resources required for goal accomplishment, and identify sub-goals as milestones or stepping goals to accomplishment, they have created an imaginal, implicit successful experience related to the COVID-19/VUCA situation, providing a much needed sense of control in an otherwise VUCA context that may be overwhelming. This modeled success builds a social contagion effect that can spread through the family/team/organization. The members are able to visualize accomplishing each step toward their goal with the guidance of the PCG. In other words, in this input into the PCI, trainees gain implicit task mastery and in real time experience success to enhance their individual and collective efficacy in the pandemic and VUCA context.

Exploring the process of building PsyCap efficacy further and through example, as the trainees learn about their strengths and weaknesses, they begin to build collective self-awareness. This includes an understanding of inherent personality factors, responses to stress (and different stressors), and coping mechanisms (domain and, if required, diagnosis specific). Those self-aware also can develop specific evidence-based practices to increase their confidence by focusing on task mastery (i.e., using appropriate coping skills), positive feedback and social persuasion, modeling, vicarious learning, and physiological and psychological arousal through physical and mindfulness exercises.

(Continued)

PsyCap Resource

Resilience

There are three major recognized components of resilience attributed to the work of well-known developmental psychologist Ann Masten: asset factors, risk factors, and influence processes. In the PCI, these components are discussed at the individual level but can also be easily adapted to the collective level (family, team, and organizational). Assets refer to factors that increase resiliency (e.g., education, experience, cooperation, and social support). Masten's research, as well as others, has found that resilience factors can be developed, managed, and accelerated. The most effective development strategies were found to be based upon enhancing assets, and proactively avoiding risky, potentially adverse events.

The resilience input into our PCI, led by the PCG, focuses on developing and changing perceptions of influence through cognitive, emotional, and behavioral processes. Highly resilient people are characterized by a staunch view of reality. Thus, as the resilience input into our COVID-19/VUCA specific PCI strategy, participants identify a recent setback. This can be major (e.g., recent COVID-19 outbreak or diagnosis) or minor (VUCA related stressors) requiring the development of new coping strategies. Participants are then instructed by the PCG to write their immediate reactions to the identified setback. The PCG then elaborates on examples of a staunch view of reality and an ideally resilient process for mentally framing/re-framing a setback. This may include what is within the trainee's control, out of her/his control, and various options for taking corrective, hopefully collective (i.e., the whole family, team, organizational) action.

In affecting the perception of influence in building resiliency, cognitive processes are employed to frame the setback (s) in terms of impact, control, and options associated with the participant's goals set for hope/efficacy development. Trainees are asked by the PCG to repeat and practice these new processes on additional relevant setbacks at school/work/home. The repetition reinforces learned cognitive processes which perpetuate the development of not only resiliency, but also "realistic" optimism. This is a good demonstration of the interactive, synergistic nature of the PsyCap positive resources.

Trainees are encouraged by the PCG to practice anticipating and addressing setbacks associated with goals in the hope building process, again related to the COVID-19/VUCA context. When participants more accurately frame a setback in terms of true impact (e.g., an inconvenience vs. a tragedy), control, and options, they are more apt to not only bounce back from a setback but may be able to attain levels even above where they started. Thus, going beyond the original level of the trainee's well-being and performance after a setback is central to the collective resiliency input in the specific PCI development process.

Exploring the process of building PsyCap resilience further and through example, having identified strengths and weaknesses will further explore assets, influences and control. When adversity does strike, trainees learn how to quickly deploy previously identified assets and assess which factors are currently within and outside their control. Finally, the trainees try to mitigate and proactively strategize how to circumvent the obstacles and identified risk factors which may impede their bouncing back and beyond.

When it comes to optimism, we draw from expectancy-value orientation and positive attributional, explanatory style, with realistic optimism being the ideal. From a collective perspective, the PCG requests the trainees complete an exercise where each member writes down three things, they are thankful/grateful for as it relates to their family, team, and/or unit. If appropriate, each member shares their three things within the group, and then they collectively build out a list of family, team and/or attributes they currently possess. This list should be guided by the contribution made towards meeting set goals and strengthening their unit's bond, cohesion, and satisfaction. The PCG then provides information to the members about how hope, efficacy, and resilience can also provide value by building their unit's optimism. The PCG brings out that the addition of optimism to hope, efficacy and resiliency is the final piece of PsyCap's "HERO within". In addition, the PCG emphasizes how optimism can impact decision making under stress, Barry Staw's so-called threat rigidity cycle, and common reactions to stress. The trainees are also asked to reflect and identify who in their unit may be naturally optimistic and pessimistic. Critical in this phase of the PCI is that the PCG emphasizes that there is no one gold standard. Each member contributes unique individualized assets that contribute to the well-being and the performance of the unit. In fact, a naturally optimistic member may gain great value by spending time with a pessimistic member in identifying obstacles to goals and finding the level of optimism which is rooted in a staunch sense of reality (as indicated, a hallmark of resilience). The PCG will describe tendencies between optimists and pessimists. For example, in preparing for obstacles, pessimists lose more feasible options by expecting bad things will tend to happen. In the collective hope development portion of the PCI, the worst-case and best -case scenarios are anticipated, and preparations are proactively in place for the trainee to continue to move ahead and succeed. This process counteracts pessimism and supports the development of realistic, yet optimistic, expectations and is reinforced by positive "self and family/ team/organization talk".

Exploring the process of building PsyCap optimism further and through example, trainees are told to engage in small, daily rituals (i.e., doing specific things at specific times, such as taking the family dog for a walk together as a time to connect and get exercise) to boost optimism. Another example would be identifying positive emotions that occur daily (e.g., quarantine provides opportunities for family members to enjoy more meals together, opportunities to play games, engage in active listening with one another) and taking moments to reflect or share these collectively. They can also benefit by engaging in positive future planning with fellow teammates and/or organizational colleagues, increasing hope and optimism simultaneously (synergistically).

Optimism

A final word

While this PCI can be used to help in the COVID-19/VUCA context it is important to recall that PsyCap is not domain specific and is applicable and has been demonstrated in numerous contexts and cultures. The thinking styles, practices, and skills that are developed through this PCI are

expected to provide an additive value to the well-being and performance of individuals, families, teams, organizations, communities, and even countries. The PCI can serve as a repeatable framework developed throughout the course of one's lifetime to optimize well-being and performance across many different domains.